

**REMARKS**

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

In response to the Restriction Requirement, Applicants hereby elect the claims of Group II (including claims 2-12), drawn to antibodies which specifically bind to polypeptides of SEQ ID NO:1, compositions comprising the antibodies, and methods of making antibodies, with traverse.

Claims directed to methods of using the claimed antibodies for detecting a polypeptide of SEQ ID NO:1 (i.e., claim 13), and for purifying a polypeptide of SEQ ID NO:1 (i.e., claim 14), could and should be examined together with the product claims from which they depend, per the Commissioner's Notice in the Official Gazette of March 26, 1996, entitled "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)" which sets forth the rules, upon allowance of product claims, for rejoinder of process claims covering the same scope of products. Applicants presume these method claims will be rejoined, upon determining allowability of the product claims from which they depend.

It is also submitted that claim 1, drawn to polypeptides of the invention, could be examined along with the antibody claims without undue burden on the Examiner. A search for prior art to determine the novelty of the antibodies would substantially overlap with a search of the prior art to determine the novelty of the polypeptides specifically bound by the antibodies.

Applicants reserve the right to prosecute non-elected subject matter in subsequent divisional applications.

If the Examiner contemplates other action, or if a telephone conference would expedite allowance of the claims, Applicants invite the Examiner to contact the undersigned at (650) 621-8581.

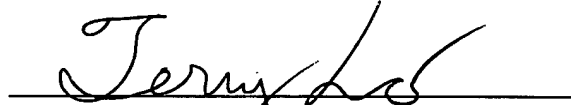
Applicants believe that no fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Deposit Account No. **09-0108**.

Respectfully submitted,

INCYTE GENOMICS, INC.

Date:

March 5, 2003



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION**

The paragraph immediately following the title has been amended as follows:

This application is a **DIVISIONAL** application of U.S. application serial number 09/206,499, filed December 7, 1998, which issued on February 27, 2001 as U.S. Patent No. 6,194,385, entitled [NOVEL] CALCIUM-BINDING PROTEIN, which is a divisional application of U.S. application serial number 08/828,242, filed March 31, 1997, which issued on February 16, 1999 as U.S. Patent No. 5,871,970, entitled CALCIUM-BINDING PROTEIN. Both of these applications are hereby expressly incorporated by reference.

**IN THE CLAIMS**

Claims 15-20 have been canceled, without prejudice or disclaimer.

Claims 2-4, 6-10, and 13-14 have been amended as follows:

2. (Once Amended) An isolated antibody which specifically binds to a polypeptide selected from the group consisting of [claim 1] :

- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,
- b) a polypeptide comprising a naturally occurring amino acid sequence at least 80% identical to the amino acid sequence of SEQ ID NO:1, wherein the polypeptide binds calcium,
- c) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, wherein the fragment binds calcium,
- d) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, wherein the fragment comprises residues A90-L102 of SEQ ID NO:1,

e) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, wherein the fragment comprises residues D213-Y225 of SEQ ID NO:1,

f) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, wherein the fragment comprises residues D254-V266 of SEQ ID NO:1, and

g) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, wherein the fragment comprises residues D290-I302 of SEQ ID NO:1.

3. (Once Amended) [An] A composition comprising the antibody of claim 2[, wherein the antibody is linked to] and a reporter molecule.

4. (Once Amended) A composition comprising the antibody of claim 2 and [a pharmaceutically] an acceptable excipient.

6. (Once Amended) A method of preparing a polyclonal antibody with the specificity of [an] the antibody of claim 2, the method comprising:

a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1, or an immunogenic fragment thereof, under conditions [suitable for eliciting] to elicit an antibody response,

b) isolating antibodies from the animal, and

c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which specifically binds to the polypeptide.

7. (Once Amended) [An] A polyclonal antibody produced by the method of claim 6.

8. (Once Amended) A method of preparing a monoclonal antibody with the specificity of [an] the antibody of claim 2, the method comprising:

a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1, or an immunogenic fragment thereof, under conditions [suitable for eliciting] to elicit an antibody response,

- b) isolating antibody-producing cells from the animal,
- c) fusing the antibody-producing cells with immortalized cells in culture to form monoclonal antibody-producing hybridoma cells,
- d) culturing the hybridoma cells, and
- e) isolating from the culture monoclonal [antibodies which specifically bind to the polypeptide] antibody with the specificity of the antibody of claim 2.

9. (Once Amended) [An] A monoclonal antibody produced by the method of claim 8.

10. (Once Amended) [An] The antibody of claim 2, wherein the antibody is:

- a) a chimeric antibody,
- b) a single chain antibody,
- c) a Fab fragment, [or]
- d) a F(ab')<sub>2</sub> fragment, or
- e) a humanized antibody.

13. (Once Amended) A method for detecting a polypeptide comprising the amino acid sequence of [claim 1] SEQ ID NO:1 in a sample, the method comprising:

a) [combining] incubating the sample with [an] the antibody of claim 2 [which specifically binds to the polypeptide] under conditions [suitable for] to allow specific binding [between] of the antibody and the polypeptide, and

b) detecting specific binding, wherein specific binding indicates the presence of [the] a polypeptide comprising the amino acid sequence of SEQ ID NO:1 in the sample.

14. (Once Amended) A method of purifying a polypeptide comprising the amino acid sequence of SEQ ID NO:1 from a sample, the method comprising:

a) [combining] incubating the antibody of claim 2 with the sample under conditions [suitable for] to allow [formation of a complex between] specific binding of the antibody and the polypeptide, and

- b) [isolating the complex formed between] separating the antibody from the sample and obtaining the purified [polypeptide, and
- c) recovering the polypeptide by isolating the polypeptide from the antibody under conditions suitable for disruption of the complex formed between the antibody and the] polypeptide comprising the amino acid sequence of SEQ ID NO:1.

New claims 21-26 have been added as follows:

- 21. (New) A composition of claim 4, further comprising a label.
- 22. (New) A composition comprising the polyclonal antibody of claim 7 and a suitable carrier.
- 23. (New) A composition comprising the monoclonal antibody of claim 9 and a suitable carrier.
- 24. (New) An isolated antibody which specifically binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:1.
- 25. (New) An isolated antibody of claim 2, which specifically binds to a polypeptide selected from the group consisting of:
  - a) a polypeptide consisting of the amino acid sequence of SEQ ID NO:1,
  - b) a polypeptide consisting of residues A90-L102 of SEQ ID NO:1,
  - c) a polypeptide consisting of residues D213-Y225 of SEQ ID NO:1,
  - d) a polypeptide consisting of residues D254-V266 of SEQ ID NO:1, and
  - e) a polypeptide consisting of residues D290-I302 of SEQ ID NO:1.

26. (New) An isolated antibody of claim 2, which specifically binds to a polypeptide selected from the group consisting of:

- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1, and
- b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1, wherein the polypeptide binds calcium.